

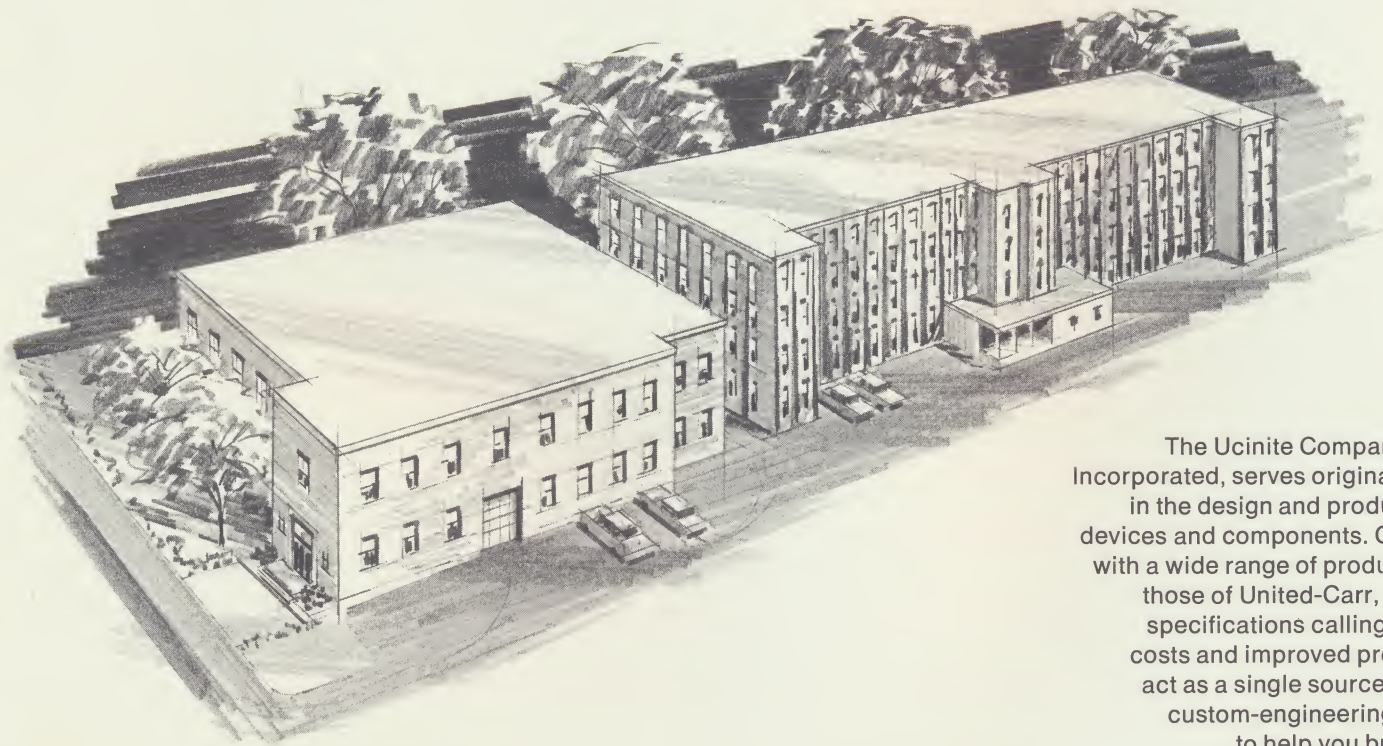
***meeting
your***

***design
challenge . . .***

***How Ucinite can help you
solve design problems
with custom-engineered
electromechanical products***

This is UCINITE

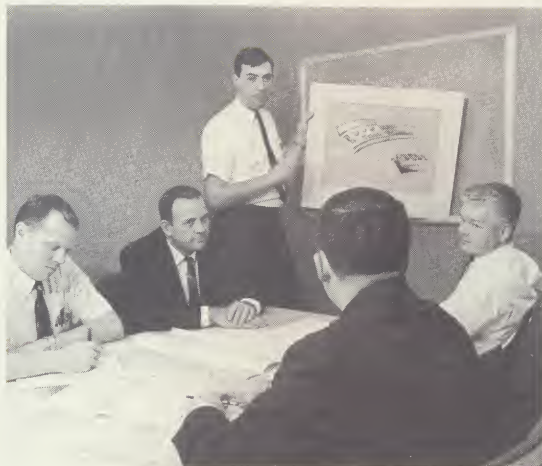
**The company . . .
its resources . . .
and how they can work for you.**



The Ucinite Company, a division of United-Carr Incorporated, serves original equipment manufacturers in the design and production of electromechanical devices and components. Combining design versatility with a wide range of production capabilities including those of United-Carr, Inc., Ucinite helps you meet specifications calling for reduced manufacturing costs and improved product reliability. Ucinite can act as a single source assuming responsibility for custom-engineering, fabrication, and assembly . . . to help you build better products for less.

The problem solvers

**Brainpower that
meets your every
design challenge . . .**



Ucinite field application engineers serve as your link with Ucinite's staff of experienced design innovators. This staff is backed up by a wealth of engineering management and design talent throughout the vast United-Carr organization. Ucinite works closely with the United-Carr Exploratory Development Laboratory, part of the United-Carr Research and Development Center in Cambridge, Mass. Its scientists and engineers, each an expert in his field, assist in achieving the ultimate solution to design challenges.



Advancing your design solution from paper to prototype, Ucinite design engineers team up with specialists in materials, fabricating, assembly, finishing, quality control, and cost control. Result: maximum reliability at minimum production cost.



Here in the Ucinite Environmental Test Laboratory, the prototype undergoes exhaustive tests that result in specifications being frozen or modified as required. From this stage, the part or subassembly moves on to full-scale production.

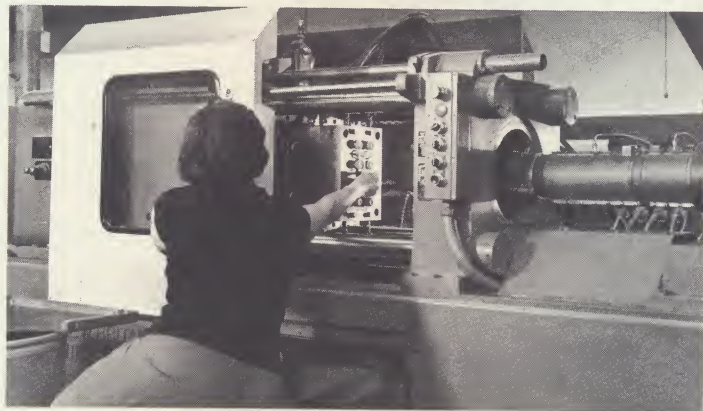
***from blueprint
to reality...***

***Ucinite offers you
capability-in-depth
for high-volume production
of electromechanical products.***

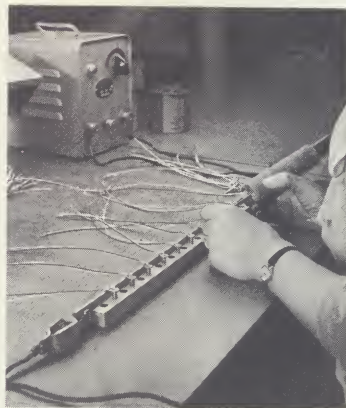


Ucinite simplifies complex assembly operations with specially designed work aids such as this wiring jig that speeds lacing of multiple wires.

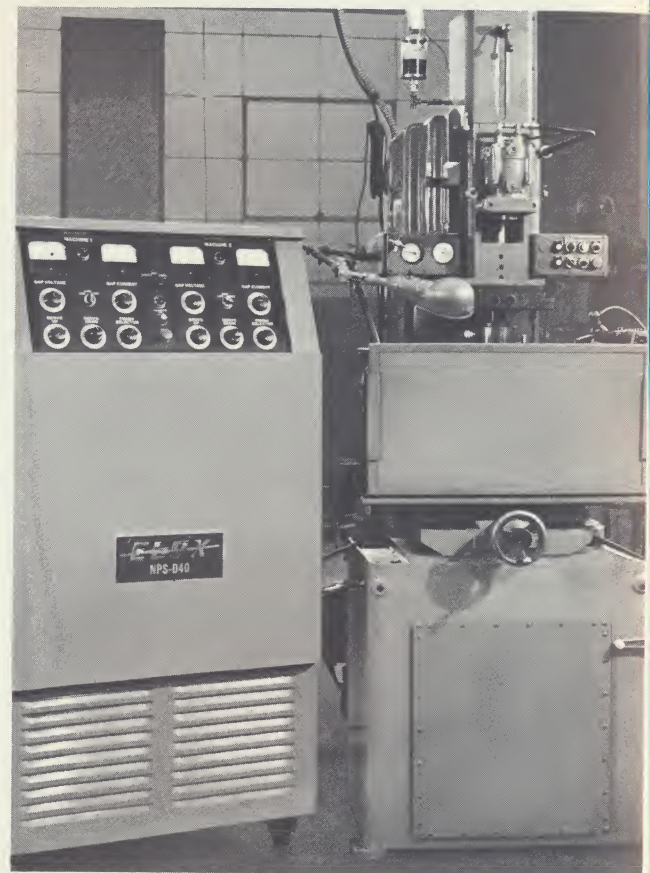
Modern high-speed injection molding machines handle a variety of thermoplastic materials. Compression molding of thermoset materials is also performed.



Skilled hand-solderers attach leads to socket terminals quickly and accurately, using aligning jigs that also serve as heat sinks.



Ucinite creates many of its own dies and molds on EDM equipment that economically duplicates intricate patterns in hardened steel.



***from blueprint
to reality...***

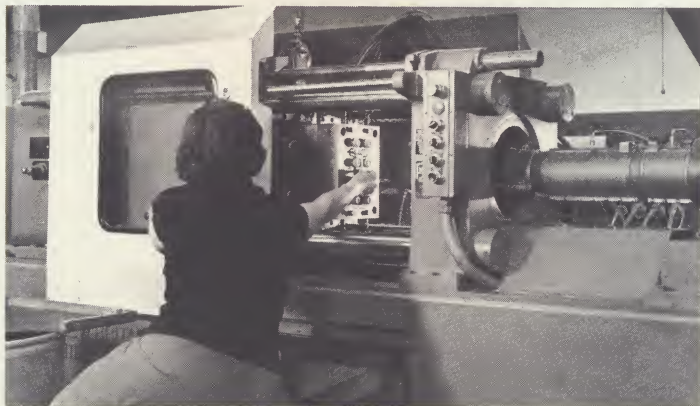


***Ucinite offers you
capability-in-depth
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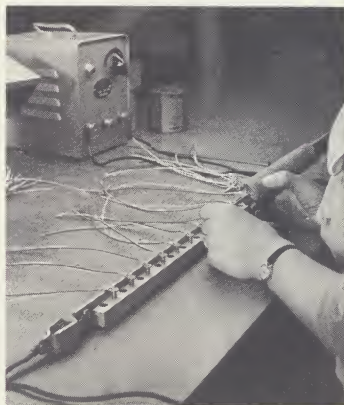


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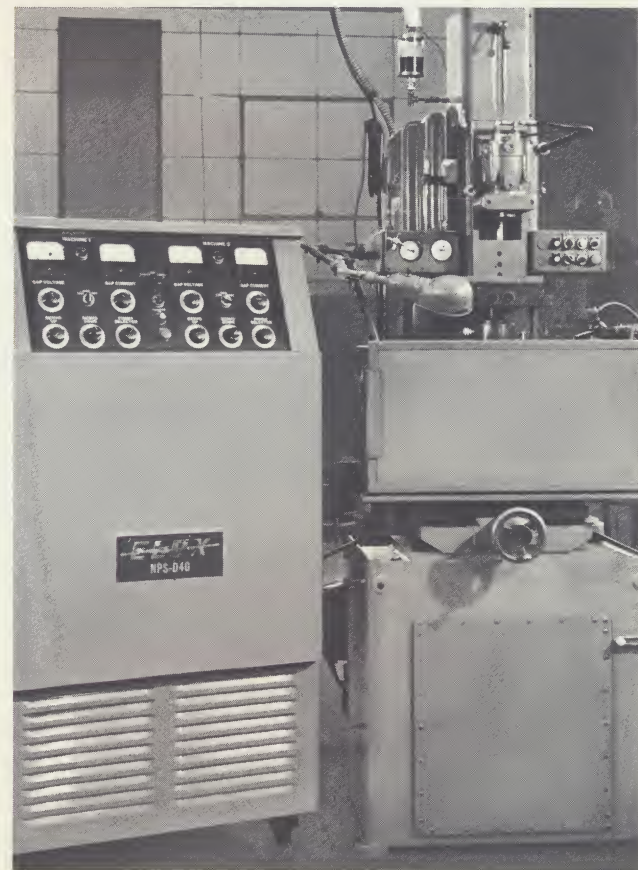
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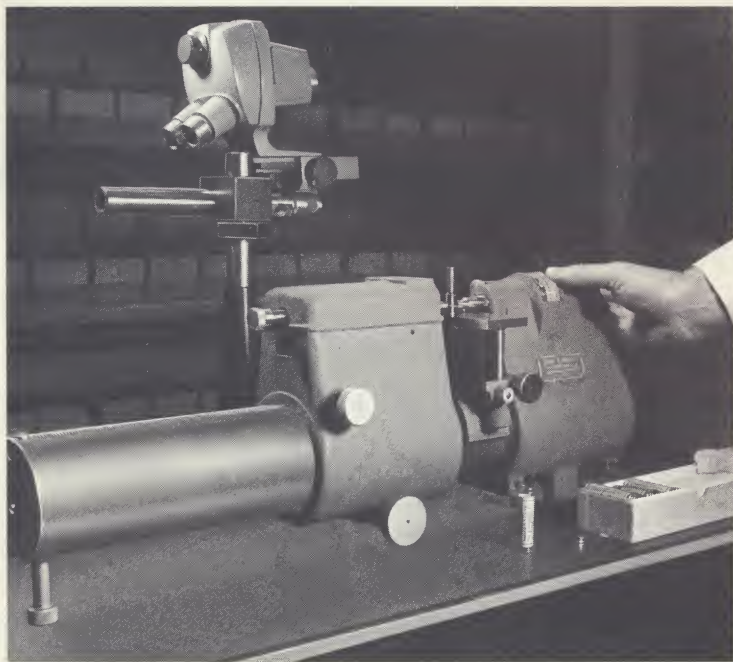


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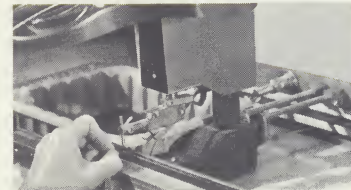


*from blueprint
to reality...*

Gauges used for in-process quality control are calibrated regularly against super micrometers in the Ucinite Gauge Control Room.

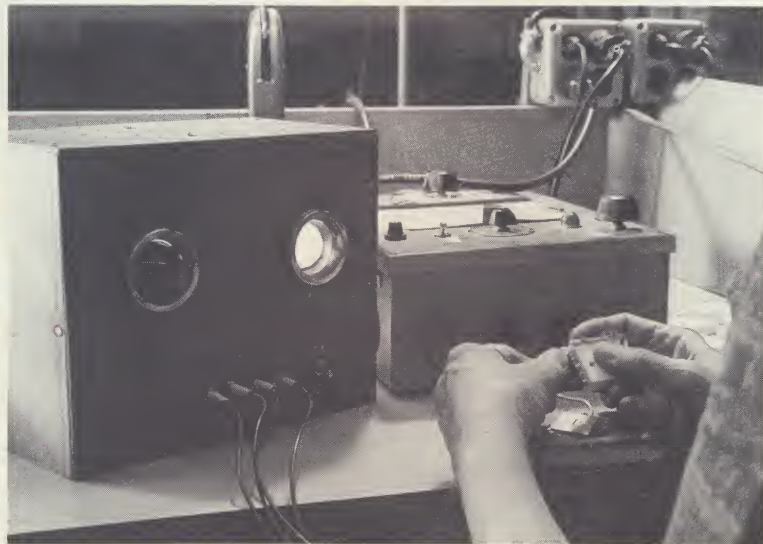


Batteries of eyelet machines convert coils of strip metal into precision-formed intricate parts — in just seconds.



Maintaining critical tolerances in welding miniature parts is no challenge to Ucinite's skilled operators using newest precision welding equipment.

One of Ucinite's many final inspection stations where each part or sub-assembly must pass critical tests before it's shipped.

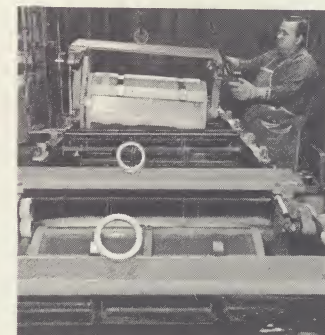


These high speed power presses require only feeding of stock rolls and occasional adjustment of the coolant to deliver a continuous stream of stamped parts.



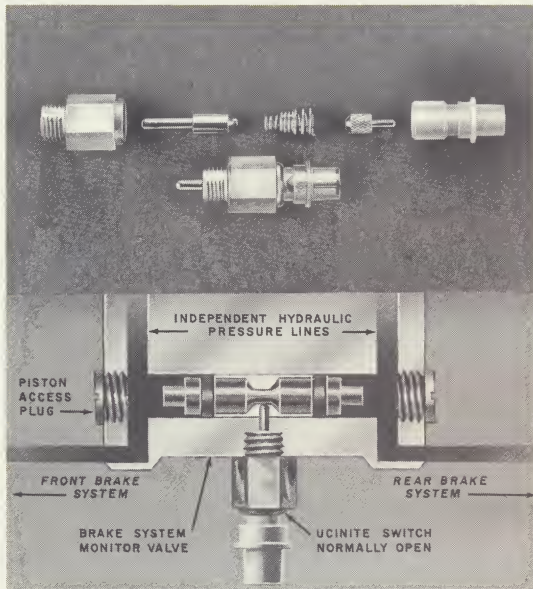
All plated parts undergo critical in-process inspection on a "Beta Scope" to assure that plating quality and thickness meet specifications.

Part of Ucinite's extensive facilities for close-tolerance plating with silver, nickel, cadmium, zinc, and gold.

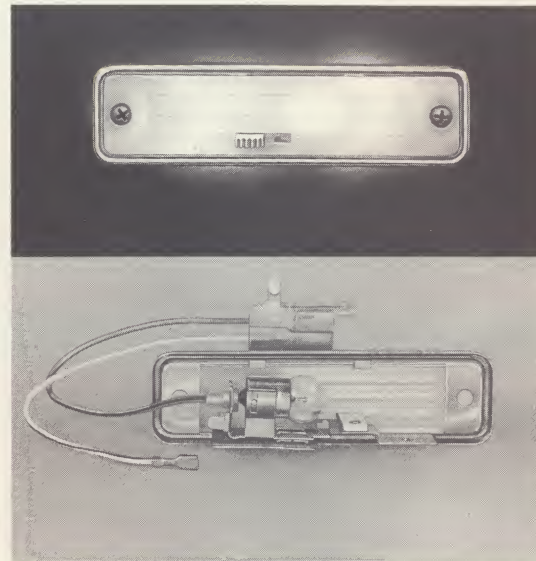


Serving industry
Typical Ucinite success stories
in typical industries ...

Automotive ...

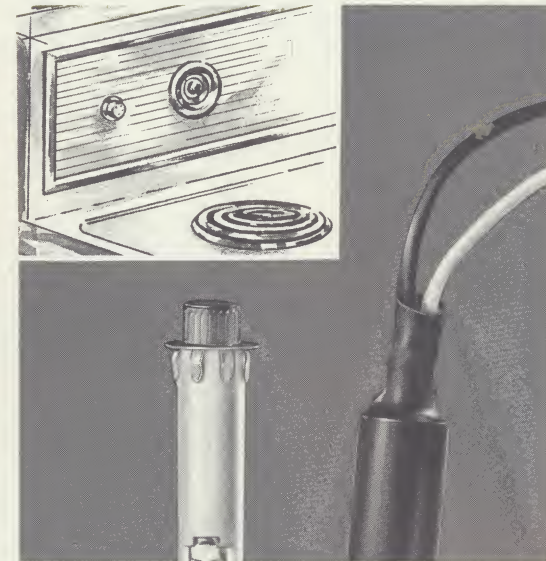


To build maximum safety into new auto dual-braking systems, Ucinite developed a switch for the monitor valve to actuate a warning light in case of malfunction. The switch had to meet high reliability requirements, and critical electrical and mechanical specifications at low cost. The resulting design was a plunger-type contact switch, normally open, that grounds directly to the valve body.



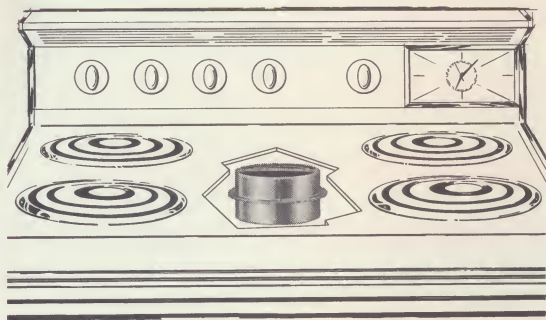
Ucinite helped an auto manufacturer lower cost of a two-circuit map-courtesy light for his dash panels. A single-contact bulb was specified for wiring economy, and operated by selective grounding. The bulb-holder assembly was a precision clip design, and made in an economical one-piece stamping to provide the four spring mechanisms needed. Low-cost standard components were used for contacts, terminals, and insulators.

Electrical



A dual-function indicator light developed by Ucinite packs two different messages into one lamp, one space-saving housing. The same pilot light glows steadily to indicate "Power On", or flashes a warning signal that tells the appliance user to "Act Now." The light is actually a standard low-cost Ucinite indicator lamp with a solid-state flashing unit added to the snap-on wiring harness. Just another example of Ucinite cost-saving innovations.

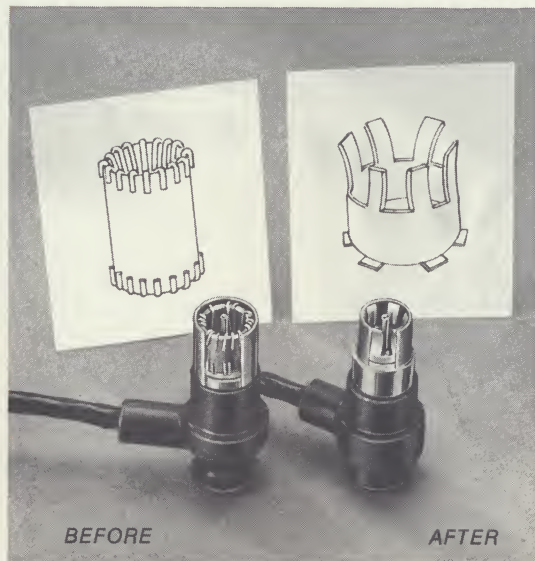
Appliances



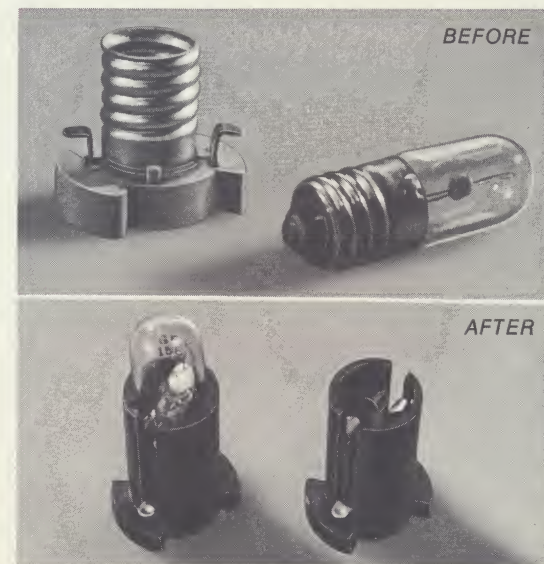
Ucinite, together with the United-Carr Exploratory Development Laboratory, developed a catalytic burner for the new self-cleaning electric range ovens that eliminates the smoke and residue generated during the cleaning cycle. The unit also eliminates the need for outside exhaust ducts. The oven waste material, a hydrocarbon, is consumed in a simple catalytic reaction that forms carbon dioxide and water. The catalytic burner, installed in the oven vent, is formed of a flat coil containing a ribbon of high-temperature fabric treated with a catalyst and wound inside a ribbon of corrugated metal. All components were selected for optimum performance/cost ratios.

Electronics

To lower production costs of a two-conductor electronic patch cord, which mates with jacks on printed-circuit boards, Ucinite was asked to redesign parts — staying within the same envelope dimensions for retrofit with existing equipment. Modifications also had to meet tight military specifications. By replacing costly screw-machined parts and toroidal wound spring contacts with economical stamped parts, Ucinite cut manufacturing costs nearly 50%.



A leading manufacturer of telephone equipment asked Ucinite to redesign bulb-socket assemblies used in illuminated-dial telephones, to improve accessibility for lower service costs when replacing burnt-out bulbs. The resulting Ucinite design not only made bulb replacement easier, but also lowered socket-assembly manufacturing costs. Another example of how Ucinite helps you build better products for less.





**Let
UCINITE
help you
build better products
for less . . .**

Ucinite design and application engineers are at your disposal to help you find new ways to reduce manufacturing costs, improve reliability — *build better products for less.*

Your local Ucinite field engineer will be happy to drop by for a firsthand survey of your problems . . . to help you start on the road to a soundly engineered low-cost solution.

Just call or write, outlining your needs, and we'll take it from there.



DIVISION OF UNITED-CARR

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